How the Soviets Emasculated America's Deterrent

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In 1956, when Khrushchev threatened to intervene in the Suez crisis with nuclear rockets, NATO Commander Gruenther replied, "Moscow will be destroyed as night follows day," and Khrushchev backed away. In 1973, as Soviet troops prepared to enter the Yom Kippur War, Nixon and Kissinger faced Brezhnev down with the threat of a nuclear attack.

In 1979, when Soviet troops moved into Afghanistan, Carter held a meeting with his advisers, considered a nuclear alert, and decided to withdraw from the Olympics.

What had changed between 1973 and 1979? What was the Carter Administration afraid of? Figures on the growth of the Soviet nuclear arsenal suggest the answer. In 1973, the Soviets had no militarily effective nuclear warheads — the accurate kind that can land within a few hundred yards of a hardened missile silo or communications center and destroy it. Accurate warheads are the key to the use of a nuclear arsenal for intimidation, because if used in sufficiently large numbers in a first strike, they can cripple the other side's nuclear forces, and prevent him from effective retaliation. The United States had more than 1,000 accurate warheads in 1973. The yield of these warheads was not very large, but the Soviet targets were not very well protected either. As a consequence, we could cripple the Soviet nuclear forces, but they could not cripple ours.

But in 1974, the Soviets started deploying accurate warheads, and in 1977 — a critical year of transition — they reached parity with the United States in this important category of strategic weapons. By 1979, they had 3,450 accurate weapons capable of a first strike — more than twice as many as the U.S.

The result, according to then Secretary of Defense Harold Brown, was that by 1979 the Soviet Union could destroy 95 percent of our Minuteman ICBMs in their silos. They could also, Secretary Brown reported, "destroy our bombers by a barrage attack . . . so that even if the bombers got off the ground, they may not escape."

When Nixon and Brezhnev signed the ABM Treaty in 1972, the Americans thought they had obtained a promise from the USSR that it would not menace the survivability of our retaliatory forces in this way. The essence of MAD and the ABM Treaty, after all, was the guaranteed ability to

devastate the adversary's homeland if he attacked. In fact, the Americans felt so strongly about this point that they added a "unilateral understanding" to the ABM treaty, in which they said a prime purpose of the negotiation was to "reduce threats to the survivability of our respective retaliatory forces." Failure to reach an agreement on that point, the American negotiators said, "would constitute a basis for withdrawal from the ABM treaty."

But the ink was hardly dry on the ABM Treaty when the Soviets began to slide into their silos the first of a new generation of Soviet ICBMs, more accurate than previous Soviet ICBMs, and good enough to take out our missile silos, command and control centers and other top-priority military targets. The Soviets kept on building these accurate, first-strike weapons until, in 1979, as Secretary Brown noted, they had enough of them to place at risk a large fraction of our nuclear deterrent.

And the Soviet arsenal continued to grow. By 1981, the number of accurate Soviet warheads had reached nearly 5,000, leading Secretary Brown to comment, in his annual report to Congress, on "the degree of emphasis in Soviet military doctrine on a war-winning nuclear capability." In one of the great understatements of all time, Dr. Brown called this development "troublesome."

The biggest of the new Soviet missiles, and the biggest ICBM in existence, is the SS-18. The SS-18 is twice as large as an MX, weighs 200 tons, is as high as a 10-story building, can carry at least 10 warheads — each with destructive power exceeding half a million tons of TNT — and has sufficient fuel in reserve to "cross-target" the entire United States. SS-18 warheads are very accurate — better than the Mark 12A warheads which have been the mainstay of the U.S. ICBM arsenal for years. The SS-18 is certainly the most fearsome weapon of mass destruction ever devised by man.

At last report, the Soviets had 308 SS-18s in the field, carrying more than 3,000 warheads. They also had 360 SS-19s and 150 SS-17s, with warheads of comparable accuracy. The number of accurate warheads known to us in this arsenal totals nearly 6,000. The destructive power residing in the deployed SS-18s alone is greater than the destructive power of the entire U.S. missile force.

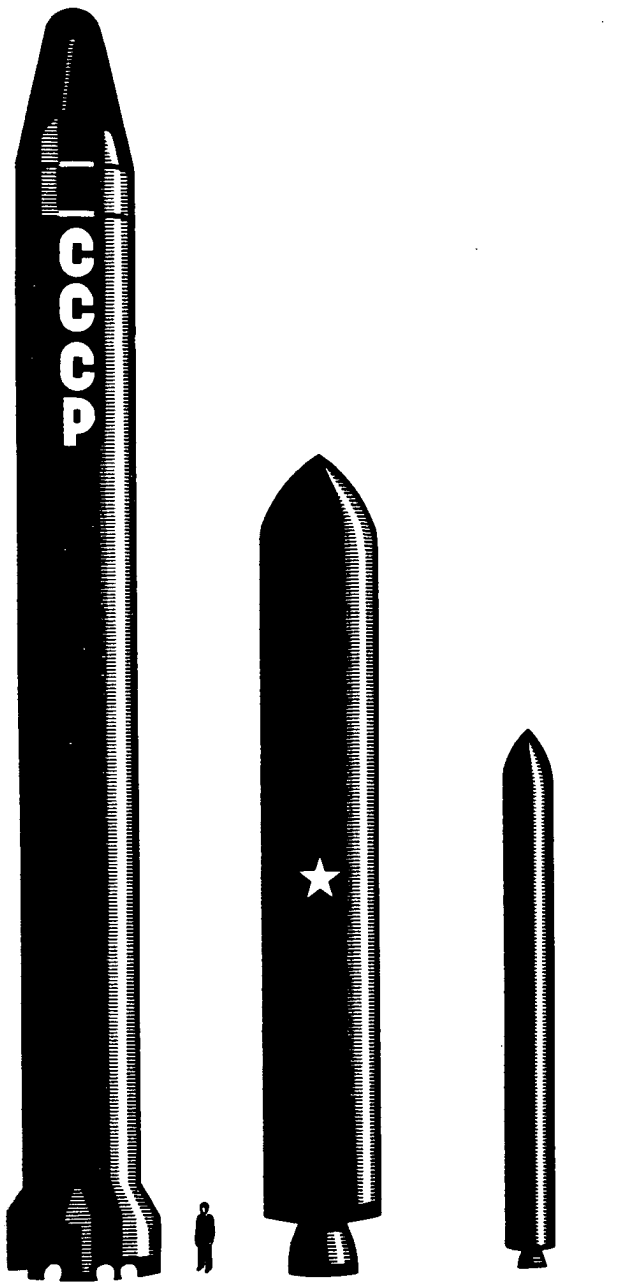
And the Soviet ICBM buildup continues, apparently without letup. The USSR is now deploying the first of its new fifth-generation missiles, the SS-25, and is about to deploy the 10-warhead SS-24. Both missiles are mobile. The SS-24, which is the size of an MX, is designed to be carried around the country on a railroad flatcar. The SS-25, about the size of a Minuteman, can be carried on the back of a truck.

The mobility of the new Soviet missiles makes a mockery of offers by Soviet leaders to reduce their nuclear forces. We will never be able to tell how many SS-24s and SS-25s the Soviets have because, as James Hackett, former Acting Director of the Arms Control and Disarmament Agency, points out, the SS-24s and the SS-25s, and SS-20s as well, "can be in bunkers, hangars, factories, tunnels, garages — U.S. satellites can't see or count them."

A few months ago the USSR successfully tested a follow-on to the SS-18, apparently even larger than the SS-18, and with even more accurate warheads. There are also reports of follow-ons to the SS-19 and SS-20 (which is accepted by the U.S. as a European and Asian "theatre" missile, but can target the United States if one or two of its three warheads are left off). Finally, the Department of Defense has reported signs of a *sixth* generation of ICBMs — follow-ons to the SS-24 and SS-25, and also mobile.

The CIA estimates that by the mid-1990s these new missiles can increase the size of the Soviet ICBM arsenal from around 6,000 warheads, its "official" value today, to between 10,000 and 12,000 warheads — all accurate, fast, first-strike weapons capable of destroying U.S. military targets. Around 1995, with this combination of accuracy, prompt delivery and great numbers of warheads, the Soviets will have a first-strike force of terrifying potential.

What security needs in the Soviet Union require this enormous number of ICBM warheads? The Soviet arsenal has long since passed the limits of any reasonable nuclear force aimed solely at deterrence of an American attack. If deterring a nuclear attack were the main goal of Soviet military planners, they would have created a relatively small force of ICBMs, as the U.S. did, and placed the bulk of their resources in second-strike weapons — submarines and bombers. Most (80 percent) of the U.S. arsenal consists of second-strike weapons, either



SS·18 MX MIDGETMAN

too inaccurate (on submarines) or too slow (on bombers and cruise missiles) to use in a first strike.

With the Soviets, it was the other way around. Most (75 percent) of their warheads are on ICBMs — fast, accurate, and usable in a first strike.

The critical asymmetry between the U.S. and the USSR in numbers of first-strike warheads is masked by figures published now and then for the total numbers of warheads in the two arsenals. The U.S. strategic arsenal has a total of about 11,000 strategic nuclear weapons, in the form of ballistic missile warheads, bombs, and cruise missiles. The Soviet arsenal has a total of about 10,000 strategic nuclear weapons. But the USSR has a first-strike arsenal; the U.S. does not. The difference can mean curtains for America.

But is the Soviet arsenal really big enough for a first strike? In building a first-strike capability, large numbers of warheads are as important as accuracy and prompt delivery; a small number of warheads, even if accurately placed, will only irritate an adversary without greatly diminishing his power to retaliate. How many accurate warheads are required by the USSR to mount a crippling attack on the nuclear forces of the United States?

American capability for nuclear retaliation is concentrated in some 3,000 key military sites in the U.S. The USSR, targeting two warheads on each site for a higher probability of de-

The mobility of the new Soviet missiles makes a mockery of offers by Soviet leaders to reduce their nuclear forces.

struction, would need 6,000 accurate ICBM warheads to cripple our retaliatory power. The Soviet nuclear arsenal projected for the mid-1990s will have sufficient numbers of accurate warheads to do that. After the first strike, the USSR will still have thousands of warheads left for a punishing attack on American cities — if we should be so rash as to attempt to

retaliate with the remnant of our nuclear forces surviving the first strike.

Does the U.S. have a first-strike force? The Soviet target list is about the same length as our own — a few thousand key sites. The American ICBM arsenal contains 900 warheads with an accuracy and a destructive power comparable to that of the 6,000 first-class Soviet ICBM warheads (although none comes close to the lethality of the SS-18). When the planned force of 50 MXs is deployed, it will add another 500 accurate warheads to the U.S. arsenal for a total of 1,400. The remainder of the U.S. arsenal is too inaccurate to be useful against well-protected Soviet targets.

Assigning two warheads to a target, this relatively modest U.S. arsenal of 1,400 accurate weapons can take out 700 targets in the USSR — a minor dent in the Soviet target list. The U.S. arsenal has the accuracy, but not the necessary numbers, to cripple the nuclear forces of the Soviet Union. Mounting a first strike against the Soviet Union with that arsenal would be a suicidal act.

The U.S. plans to deploy larger numbers of accurate warheads in the 1990s, on the Midgetman ICBM and also on a radically new type of submarine-launched missile called the D-5. The D-5 compensates for the inaccuracies of a launch from a submarine by taking a navigational fix on a star or an overhead satellite after it has been launched and correcting its course in midflight. The course corrections are supposed to make the D-5 nearly as accurate as the best ICBMs.

The Midgetman ICBM will not have much effect on the strategic balance because Midgetman warheads are very expensive ($80 to $100 million per warhead compared to $20 million per warhead for the MX) and the Defense Department only plans to buy 500. But the D-5 is another story. Thousands of D-5 warheads are slated for deployment in the 1990s. If they work out as expected, they should be very effective against an SS-18 silo or any other immovable target.

But therein hangs a sad tale for U.S. defense planners, for the USSR has already taken steps to negate the effectiveness of the D-5 — as well as the MX and the Midgetman — by putting its newest ICBMs on mobile platforms — trucks and flatcars. Unfortunately, while the extraordinary precision of a D-5 or an MX makes it a deadly weapon against an SS-18

in a fixed silo; it is almost valueless against a target that can quickly be moved a few thousand yards down the road.

And the USSR has also gone to great lengths to protect a second set of highly valued targets — its own leaders — from the newest U.S. weapons. More than 1,500 hardened fuhrer-bunkers have been built for 175,000 key Party and government officials — the entire top stratum of Soviet leadership. Some of the older bunkers are close to the surface and vulnerable, but the newest ones are deeply buried and probably safe from the most accurate of the new U.S. warheads. The one under the Kremlin is reported to be a mile underground.

The U.S., on the other hand, continues to keep its command structure — both facilities and people — in relatively soft, fixed locations at or near the surface, and vulnerable to the SS-18 and the new fifth-generation Soviet ICBMs. The vulnerability of the U.S. command structure is likely to continue. Imagine the outcry if President Reagan built a bomb shelter a mile under the White House.

So, thanks to Soviet foresight, even the highly accurate MX, Midgetman, and D-5 will not change the strategic picture very much. The Soviets will be able to place our important assets at risk in the 1990s, but we will not be able to place theirs at risk, because by the time the new American weapons are deployed, all the Soviet targets of prime value will be either readily movable or deeply buried.

Are Submarines Vulnerable?

At this point, the thoughtful observer will object that the menace of the Soviet nuclear arsenal has been exaggerated. After all, we still have our bombers and ballistic missile submarines.

It is true that the effectiveness of the U.S. bomber force has been compromised by the Soviet ICBM buildup, as former Secretary of Defense Brown noted; in fact considerably less than a third of our bombers are likely to escape the first wave of Soviet ICBMs, and of those that escape, a still smaller fraction will penetrate the massive Soviet air defenses, which now include 10,000 surface-to-air missiles and 12,000 air defense radars.

But the ballistic missile submarines are more effective, and

make a better case. One Trident submarine carries enough warheads to attack every large city in the Soviet Union. Furthermore, the newest U.S. submarines are very quiet and hard to find, so the Soviets cannot count on eliminating them in the first wave of their attack, as they can with our land-based missiles. At the present time, ballistic missile submarines are nearly invulnerable.

Navy sources maintain that this invulnerability will persist into the indefinite future, but other defense planners are less optimistic. Promising lines of research have developed for the detection of submerged submarines by other methods than tracking the sounds they emit. In principle, these methods work no matter how quiet the submarine is.

For example, a submerged submarine creates a wake — a disturbed pattern of waves and wavelets that trails behind it on the ocean surface. There is evidence that the wake can be seen from space, using satellites equipped with a new type of "synthetic aperture" radar. Radar images of this kind obtained from SEASAT, the NASA ocean satellite, are reported to have revealed wakes of unknown origin, that could have been produced by submerged submarines.

The problem of submarine vulnerability is compounded by the fact that the USSR now has more than 200 attack submarines, but only 10 to 12 U.S. Trident submarines will actually be at sea at any one time in the 1990s. (Submarines in port would be a relatively easy mark for Soviet first-strike warheads.) With that ratio, Soviets can assign five or even 10 attack submarines to each Trident to trail it from the time it leaves port, keeping it in a box from which it cannot readily escape.

Finally, analysts of Soviet missile capabilities note that the Soviet intercepting missiles, the SA-12s, are small enough to be placed on ships. If armed with nuclear weapons, they may be very effective in destroying our submarine-launched ballistic missiles while these are still in their boost phase. Nuclear-tipped SA-12s promise to be a deadly weapon against U.S. submarine-launched missiles, and one to which the United States appears to have no response at present.

Taking all these factors into account, the Scowcroft Commission on Strategic Forces concluded, "Over the long run, it would be unwise to rely so heavily on submarines as our

only [survivable] ballistic missile force." And in a rare display of frankness, a senior Pentagon official said two years ago, "It is a matter of time before our confidence in the invulnerability of the submarine is degraded." Informed opinion agrees that while submarines are safe today, and may remain so for a few years to come, they will not be able to hide in the oceans forever. Exactly when the submarine loses its cloak of invisibility is anyone's guess. However, it is not a question of whether, but when.

Soviet ABM Breakout

Anxiety over the extent of Soviet preparations for a first strike has been intensified by the discovery that the USSR also seems to be preparing a nationwide ABM defense. This discovery confronts defense planners with the frightening prospect of a Soviet first-strike force that can diminish considerably the American capacity for retaliation, and a Soviet ABM defense that could block whatever counterattack we might manage to get off the ground afterward with our crippled forces. The banning of this nightmarish possibility was, of course — for the Americans, at least — the driving force behind the ABM Treaty.

The ABM Treaty notwithstanding, technical reports received from the Defense Intelligence Agency and the CIA indicate that the USSR has acquired nearly all the elements needed for a defense against the ballistic missiles that would constitute the main instrument of American retaliation. The Soviet Union appears to be poised for a breakout from the Treaty.

Some experts say there is no cause for U.S. concern, because the Soviet ABM defense is not very effective. It is by no means as good as the defenses the SDI is designing for the 1990s; it is certainly not good enough to stop a massive U.S. first strike — if we were to launch one.

But the American arsenal being what it is, a first strike by the United States is of vanishingly low probability. American defense planners are not worrying about how well Soviet ABM defenses might block a U.S. first strike; they are focused on deterring a Soviet first strike — a possibility that the Soviet ICBM buildup brings to the forefront of their at-

tention. For that purpose, the American planners rely on the threat of massive destruction of the Soviet Union in a retaliatory second strike. And against a U.S. retaliatory second strike, with weakened and diminished forces surviving a Soviet first strike, the Soviet missile defense could be exceedingly effective.

At present, the Soviet ABM defenses are deployed only around Moscow, in accordance with the restrictions of the ABM Treaty. However, the CIA has confirmed existence of production lines for turning out the components of the Moscow ABM system — intercepting missiles, radars and so on — in large quantities.

Right now, the output of those production lines is only going into the defenses around Moscow, as far as we know, but new sites can be put into operation in a matter of months. By the early 1990s — four or five years from now — these components can be deployed across the USSR, defending every key Soviet target against U.S. ballistic missiles.

Concern over the intensity of Soviet ABM preparations was heightened last year by the discovery of three huge "battle management" radars — each the size of a football field — in the western USSR near Poland. These radars close the last major gap in a network of similar radars ringing the USSR. Six were already known; the last three to be discovered make a total of nine. Each of the nine has the range and precision needed to pick up oncoming U.S. warheads as they approach the USSR, determine which target each warhead is headed for, and alert individual ABM sites in that warhead's path so that they can send up a missile to intercept it.

The battle management radars are the long pole in the Soviet ABM tent, because they take many years to design and construct. But the Soviets started working on these radars a long time ago. In fact, they must have started designing them while they were still negotiating the ABM Treaty. The three just discovered near Poland are probably the last in the network. They should be finished around 1991.

The famous Krasnoyarsk radar is one of the radars in the Soviet ABM network. It looks across 2,000 miles of the USSR from central Siberia to the northeast, and covers the approach corridor for U.S. ICBMs from the missile fields in the western states. It also covers the launch of missiles from U.S. submarines in the Bering Sea. The Soviets say the Krasnoyarsk

radar is for tracking space objects, but its design makes it almost useless for that purpose. The CIA says the Soviet claim is "preposterous."

The network of nine battle management radars, combined with the facilities for mass production of ABM components, will give the Soviet Union the means for setting up a nationwide ABM defense in short order, whenever it judges the moment to be propitious for an overt breakout from the ABM Treaty. According to intelligence reports, that could be in the early 1990s.

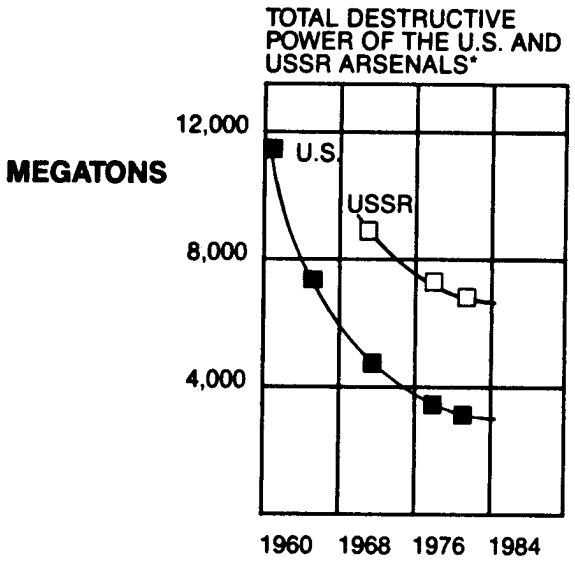
Any single one of these Soviet ABM activities would be a cause for concern to the U.S., which is still attempting to honor the ABM Treaty. But the ensemble of Soviet ABM programs is more menacing than the individual items; Robert Gates, Deputy Director of the CIA, calls it "significant and ominous."

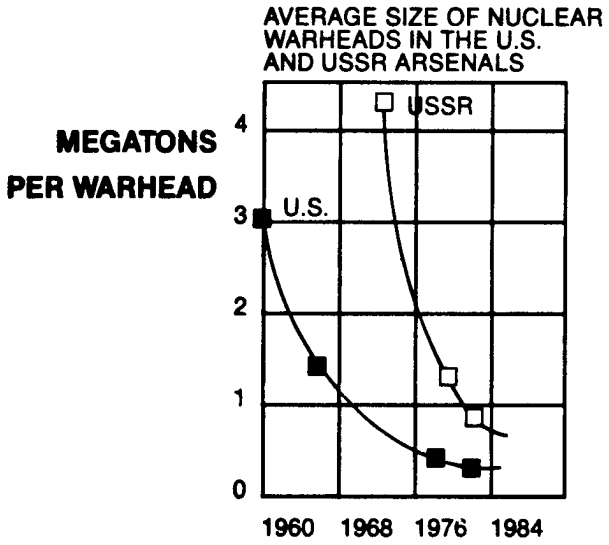
The overall pattern of Soviet activities in recent years — the ICBM buildup and the burgeoning ABM capability — suggests the the USSR is intent on positioning itself for a first strike. As a consequence of the resultant threat to the effectiveness of our retaliatory forces, the theory of deterrence by Mutual Assured Destruction is collapsing like a house of cards. If the Soviets have a sufficient number of accurate missiles to wipe out the bulk of U.S. nuclear forces in a surprise attack, and they have a missile defense and an air defense adequate to handle the ragged second aftermath of that attack, they will not be deterred by the fear of retaliation, because we will not be able to retaliate.

The Unexpected Attack

Dramatic advances in the accuracy of warheads in recent years have contributed further to U.S. fears of a Soviet first strike. Zbigniew Brzezinski has explained why these technical developments increase the chance of a missile attack on the United States.

That story starts in World War II. When the Germans were raining V-2s on Britain, they were pleased if a rocket came within 10 miles of its target. The launch crews used to point their V-2s in the direction of London and hope for the best. Later, the accuracy of ballistic missiles improved to a mile,





then to half a mile, and then to a quarter of a mile. For the SS-18 and the Minuteman III, it is 200 to 250 yards. For the MX, warhead accuracy is about 150 yards. That is, half the time an MX warhead will land within 150 yards of its target, after a flight of thousands of miles.

The remarkable precision of these weapons has an important consequence. It makes it possible to achieve the military objectives of a nuclear attack — destruction of the adversary's missile silos, command and control centers and other sites vital to his effective retaliation — with quite small nuclear weapons. The record demonstrates, in fact, that as accuracy has improved, the sizes of nuclear weapons have gone down markedly.

In 1962, the average explosive power of the nuclear weapons in the U.S. strategic arsenal was three megatons (three million tons of TNT). Today it is seven times smaller. The average explosive power of the weapons in the Soviet arsenal was 4⅓ megatons in 1970; today it is five times smaller. The total destructive power of the U.S. arsenal is a quarter of what it was in 1962; the total destructive power of the Soviet arsenal is down by about 40 percent since 1970.

These trends toward greater warhead accuracy and smaller nuclear weapons have been steady over several decades. Now, enter the Pershing 2, recently deployed in Germany. The Pershing 2 is a quantum leap behond the technology of earlier missiles, because its warheads are "smart." That is, they have computer "brains" and radar "eyes" that view the terrain below, compare what the eye sees to a map of the target area stored in the computer's memory, and then adjust the warhead's course so that it steers itself into the target.

Prior to the advent of the Pershing 2, ballistic missiles carried dumb warheads. Once a dumb warhead has been pushed off its ICBM, its course is set and cannot be changed. The accuracy of the warhead in reaching its target depends on how accurate a push it received at the start. The finest dumb warheads presently deployed are carried by SS-18s and MXs. The 150-yard accuracy of the MX is probably close to the ultimate that can be achieved with a dumb warhead.

But the Pershing 2 warheads, with their brains, eyes and ability to change their own courses, can do much better than an MX warhead. Half the time, a Pershing 2 warhead will land

within 35 yards of its target. The Pershing 2 warhead is truly a revolutionary development in missile technology. It has been said, with only mild hyperbole, that it can fly through any window in the Kremlin.

Still, the Pershing 2 is only the beginning of the new revolution in warhead technology. Experts see the possibility of warhead accuracies coming down to a few yards or even feet. They forecast the destruction of key military targets by nuclear charges so small as to produce essentially no unwanted blast damage or radioactive fallout.

At first, this trend to accurate warheads and smaller nuclear weapons seems like a good thing, because it means no wholesale destruction in a nuclear attack, and no civilian carnage. But Dr. Brzezinski has pointed out another, and less reassuring, meaning.

When nuclear warheads were all large and very destructive, he notes, a nuclear first strike was "messy and unpredictable . . . not an attractive option for either side." But small, accurate nuclear weapons are usable. They make it possible to carry out a surgical first strike — a surprise attack that decapitates the opponent's command structure and destroys the bulk of his forces, leaving him "strategically crippled, capable of only a spasmodic, disorganized and strategically aimless response — or none at all."

For the military planner, Dr. Brzezinski concludes, highly precise nuclear weapons make the dreaded first strike "a viable option."

When would the attack come? According to the conventional wisdom among American analysts, a nuclear exchange would develop out of crisis escalation, as in the Mideast crises of 1956 or 1973, or the Cuban missile crisis. As tension mounted, the U.S. would place its forces on nuclear alert; bombers would be loaded and dispersed; the entire fleet of ballistic missile submarines would be put to sea; the U.S. command structure would be geared to a prompt decision when word came that the dreaded ballistic missiles were on their way.

But the conventional wisdom is almost certainly wrong. Why would an adversary pick such a moment as this to attack, when the chances of success are minimal? It would be far better to wait until the crisis has been defused by diplomatic concessions, weary U.S. forces have been stood down from

their alert, and American leaders are relaxed in the euphoric belief that the threat of nuclear war has passed. That would be the time to strike.

The mind recoils from the possibility of the "bolt out of the blue" — a surprise nuclear attack, launched when America's guard is down, after a skillful Soviet campaign of deception and disinformation. Yet, as Dr. Brzezinski notes, in commenting on the developments in nuclear weapons in recent years, "One can disregard this possibility only at the greatest peril."

The Need for a Space-based Defense

In the ongoing, and often abrasive, argument over the Strategic Defense Initiative, this is one of the main issues that separates SDI supporters from their opponents. Opponents of SDI, by and large, do not believe that the Soviet Union can launch a successful first strike, because they do not agree that U.S. retaliatory forces are vulnerable to a surprise attack; they feel that U.S. deterrence of a Soviet attack by the threat of retaliation will remain effective for many years to come.

In our view, their confidence is contradicted by the events of the last 10 years: the new thrusts in anti-submarine warfare; the trend toward accurate, small-yield nuclear weapons; and most important, the Soviet ICBM buildup, coupled with alarming signs of Soviet preparations for an overt breakout from the ABM Treaty by the early 1990s.

As matters stand today, powerful congressional forces are opposed to the deployment of a missile defense in the 1990s. The SDI budget has been cut to levels that postpone the achievement of test objectives by several years, and a major effort is underway in Congress to force a type of compliance with the ABM Treaty that would preclude demonstrations of the first-generation space-based defenses regarded by the Department of Defense as feasible for deployment in the 1990s.

As a result of these congressional actions, it appears that the United States will have no defense — and certainly no defense based in space — against Soviet ICBMs in the 1990s. That is unfortunate, because a space-based defense located on satellites orbiting over the Soviet Union, that can shoot down the Soviet ICBMs as they rise from their silos, would have a paralyzing effect on Soviet first-strike planning. Since the

planner cannot tell beforehand which missiles and warheads will be shot down and which will get through, he cannot target key sites, such as missile silos and command posts, and be confident of their destruction. Thus, the *sine qua non* of a successful first strike — the guaranteed destruction of the adversary's retaliatory forces — is denied to him. Space-based defenses, even if their effectiveness is limited, have a toxic effect on first-strike planning.

Space-based defenses, even if their effectiveness is limited, have a toxic effect on first-strike planning.

This is not true of the "point" defense favored by some members of Congress for the protection of our MX silos and other key military sites. The Soviet planner, confronted by a point defense surrounding a small number of critically important sites, can assign five, 10 or even 20 warheads to those sites to be confident of their destruction; and yet he will have consumed only a very small part of his arsenal on those targets. But if he is confronted with a space-based defense, and feels it is essential to achieve the same level of confidence in destroying these key sites, he must multiply *his entire arsenal* by a factor of five, 10 or 20, since he does not know beforehand which particular missiles in his arsenal will be shot down. Since the present Soviet arsenal cost some $700 billion, that would mean an expenditure of trillions of dollars.

This is only true of the space-based defense, not of the ground-based "point" defense. That is one of the main reasons why Defense Secretary Weinberger has insisted on the inclusion of a space-based layer in even the earliest defenses under consideration by the Defense Department for deployment.

The outlook for the next 10 years is not promising. The congressional politics of missile defense — and especially the opposition to early deployment of a defense from prominent

Members of Congress — are such that in the early 1990s the Soviet Union is likely to have a lethal combination of a first-strike attack force and a defense against retaliation — and the United States will have neither. In these circumstances, we believe it will be clear to all that the American government cannot protect its citizens from a nuclear attack, and is no longer a nuclear superpower. The consequences, writes Robert Gates, Deputy Director of the CIA, will be "awesomely negative for stability and peace." We suggest that this development will be seen by the world as the greatest military reversal the United States has ever suffered, with catastrophic political consequences certain to follow.